REMARKS

With reference to independent Claim 14, this claim has been amended to specifically recite that the second circuit, which converts DC input voltage to a fixed DC output voltage, even when the DC input voltage varies. In addition, Claim 14 further recites that the second circuit includes a DC-to-DC up-converter. The prior art to Chen fails to teach or suggest such a claimed AC/DC input power converter. Rather, Chen teaches an AC/DC input power supply where a fixed voltage DC backup power input is simply provided to DC bus 230. This backup DC power source in Chen '972 is simply communicated to bus 230. If the backup battery voltage decreases due to age, so does the voltage on bus 230, and thus the voltage on bus 230 is not fixed as the battery voltage decreases. Applicant's claimed invention derives technical advantages in that Applicant's DC-to-DC up converter accepts a variable DC voltage input, such as from an automobile and an aircraft source which may be different, as well as an AC input, and still utilizes a single common output circuit to provide a selectable DC output voltage. Support for this limitation is found in Applicant's specification on page 8 line 22 – 25.

With specific reference to dependent Claim 16, Applicant further recites that the DC voltage provided by both the DC/DC converter and the AC/DC converter are fixed. The prior art to both Chen and Yilmaz et al., fail to teach such a circuit.

With reference to dependent Claim 17, Applicant further claims that the third output circuit includes a DC-to-DC down-converter providing the selectable output voltage. The prior art to Chen and Yilmaz both fail to teach a DC-to-DC input stage including an up-converter, and also a common DC-to-DC output stage comprising a down-converter. Applicant's claimed invention achieves technical advantages in that a predetermined DC voltage is provided to the common output circuit, regardless of whether an AC or DC input voltage is provided such that a single common single DC-to-DC output converter can be utilized. Applicant achieves this advantageous feature by utilizing a switching up-converter, and also using a switching down-converter, as specifically recited in dependent Claim 37. Applicant's invention further achieves technical advantages by operating switching both the up converter and the down converter at the same frequency to provide EMI suppression, wherein only one operating frequency is utilized

and filtered. Support for this limitation is found in Applicant's specification on page 9 line 16-24. This feature is specifically claimed in dependent Claim 38. This feature is neither taught or suggested by the prior art.

Dependent Claim 28 further recites that this up-converter and down-converter are coupled in a master/slave configuration and operate at the same frequency. The prior art fails to teach or suggest this claimed limitation.

Dependent Claim 18 further recites that the first and second predetermined voltages provided by the first and second circuits are generally the same voltage. As recited in independent Claim 14, the second circuit provides the fixed DC output voltage even when the DC input voltage varies. The prior art also fails to teach or suggest an AC/DC input circuit and a DC/DC circuit both providing the same voltages, and each predetermined voltage being provided to a common node feeding a third circuit, even when the DC input voltage varies.

Dependent Claim 19 further recites that the selectable output DC voltage from the power conversion device can be set to be higher than the input DC voltage. Applicant's claimed invention achieves this technical advantage by using an up-converter as the DC/DC input stage. For instance, the power conversion device can accept a DC input voltage between 11 VDC and 16 VDC, and output a voltage between 3 VDC and 24 VDC, as specifically recited in dependent Claims 36 and 27.

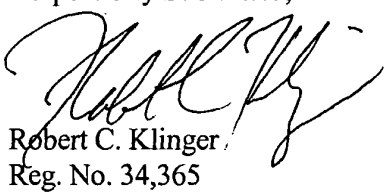
With regards to dependent Claim 20, which depends from dependent Claim 14, Applicant further recites that the third circuit is adapted to couple to a plurality of removable programming keys providing different associated DC output voltages. An AC/DC input power converter, as recited in independent Claim 14, further having a plurality of removable programming keys, is neither taught or suggested by Yilmaz et al., and is not an obvious variation thereof. Providing a removable programming key is not simply constructing a formally integral structure in various elements, and thus the present claimed invention is distinguished from *Nerwin v Erlichman* cited by the Examiner. Applicant's claimed invention provides a programmable AC/DC input power device in a new way, thus satisfying the requirements of patentability.

With specific reference to dependent Claim 21, there is recited that the key includes a resistor, whereby the predetermined output voltage is a function of the resistor value. Yilmaz et al fails to teach or suggest an AC/DC power converter, as claimed in independent Claim 14, and as further defined in dependent Claim 21. Applicant's claimed invention achieves technical advantages in that different keys can be used to obtain different output voltages using different keys having a resistor.

With specific reference to dependent Claims 21 through 25, there is further recited that the key establishes various functions, including output current limiting, over-voltage protection, output voltage, and wrong-tip functions. Yilmaz fails to teach or suggest these claimed key functions.

If the Examiner has any further matters regarding this application, the Examiner is encouraged to contact the undersigned attorney to resolve these matters by Examiner's amendment where possible.

Respectfully Submitted,



Robert C. Klinger
Reg. No. 34,365
Attorney for Applicant

Jackson Walker L.L.P.
2435 North Central Expressway, Suite 600
Richardson, Texas 75080
(972) 744-2902
(972) 744-2909 – Fax